PSYCHOLOGICAL LITERATURE.

I.—NERVOUS SYSTEM.

Das Stirnhirn. Ein Beitrag zur Anatomie der Oberfläche des Grosshirns. Mit 9 Original-Abbildungen und 1 Tafel. Dr. OSCAR EBERSTALLER. Wien und Leipzig, 1890.

To the description of the frontal lobe the author devotes a book of about one hundred and thirty pages and cites a hundred and seventeen authorities in the course of his argument. The style is exceptionally lucid and vigorous and the descriptions concise. From this it appears that a careful and conscientious author can find a good deal that is worth saying concerning the external appearance of even one lobe of the brain. The observations were made on fresh brains from which the *pia* had been removed, and over 400 hemispheres were utilized. In describing the sulci and gyri of this region the author has paid particular attention to the variations which occur, and has attempted to show the relations between the extreme variations which are observed in normal individuals. The value of this method becomes at once apparent when we recall that the brains of all sorts of defectives, of individuals possessing remarkable or peculiar mental attainments, and of criminals are, in increasing numbers, the subjects of description, in which it is continuously sought to associate the sculpturing of the surface with the peculiarities known to have existed during life. Under these circumstances and with the possibilities of the normal variations but imperfectly recognized, it is but little remarkable that a good many appearances of the brain surface which have been designated, "peculiar," "anomalous," "atavistic," "criminal," "theriomorphic," etc., are really found to be variations that appear in the normal brain and to which, therefore, no peculiar significance can properly be attached. The material of the book is arranged under the general heads of Limiting Fissures, Principal Sulci, Secondary Sulci, Gyri, and Comparative Anatomy.

In discussing the various sulci—besides regarding the depth and constancy, the time of appearance in the fœtus and their comparative anatomy—the relations of the lips of the sulci are examined to see whether either of them overlaps the other, and most especially, sunken gyri and indications of branches from the main sulcus are sought. It is perhaps due mainly to care in the study of the last two points that Eberstaller is able to harmonize many of the variations which at first seem irreconcilable. For it appears that gyri which in some individuals are sunken become exposed in others, and where a gyrus usually prominent is not at first found it can in most cases be discovered in the sunken form by closer examination. This holds not only within the species, but in the mammalian series also, where the value of these sunken gyri for comparative topographical relations is equally great. The branches of the sulci have a similar value. They may be present as rudiments or extensive developments, and the amount of their extension can serve to greatly complicate the appearance of a region without introducing any essentially new features. The main object, then, in the study of the hemispheral surface, is to establish the constant locations for the sulci and then make these a point of departure when attempting to reduce any particular hemisphere to the type. In our opinion,

Eberstaller accomplishes this task in a more satisfactory manner than any author who has preceded him. Among the structures which he discusses are the cephalic branches of the Sylvian fissure; the relations of the *sulcus præcentralis inferior* to the *sulcus frontalis inferior;* the *sulcus præcentralis medialis;* the *sulcus frontalis medius* and the 4-gyral type in the frontal lobe; the *sulcus diagonalis;* the homologies of the frontal lobe region in the monkey, and of the *sulcus cruciatus* in the carnivora. Descriptions of the sulci are followed often by epitomes of the views of other writers, thus making the book valuable for historical reference.

On the Local Paralysis of Peripheral Ganglia and on the Connection of Different Classes of Nerve Fibres with them. J. N. LANGLEY, F. R. S., and W. LEE DICKINSON, M. R. C. P. Proc. Roy. Soc., Vol. 46. Nov. 21, 1889.

Led by some experiments on the salivary gland the authors compared the results of stimulating the sympathetic nerve above and below the superior cervical ganglion in an animal which had previously received a dose of nicotin. Stimulation above the ganglion, in rabbits, caused a constriction of the blood vessels of the ear and a dilation of the pupil, while stimulation below the ganglion failed to produce these effects. It was, therefore, inferred that the impulse was interrupted in the ganglion through the action of the drug on the nerve-cells. As nerve fibres are much less susceptible to the drug than cells, the method makes it possible to distinguish between the fibres which end in a ganglion and those which pass through it without interruption. An interesting application of this method to the ganglia of the solar plexus is one of the uses thus far made of this discovery, though others are suggested, and the method promises to be of wide applicability.

La circonvolution de Broca. Étude de morphologie cérébrale. Par GEORGE HERVÉ. Avec 10 figures et 4 planches caloriées. pp. 162. Paris, 1888.

The author treats his subject, the *gyrus frontalis tertius s. inferior*, by describing it in man, according to the various schemata of the gyri; in the primates; in the human fœtus; in uneducated persons; and in those distinctly intellectual. The conclusions reached are: that the gyrus in question is extended onto the orbital surface of the brain; that the primitive type of the frontal lobes, as shown in the primates, is that of two and not three frontal gyri; that the *gyrus frontalis inferior* appears first in the anthropoid apes, and is formed by a doubling of the primitive inferior frontal gyrus; that the *gyrus frontalis inferior* forms the fourth frontal gyrus in man and the anthropoids, the *gyrus frontalis medius* of the authors being in reality two gyri; that the development of this gyrus in the human fœtus recapitulates its development in the animal series—that of the right side developing earliest; that in microcephalous persons the gyrus may be either absent, rudimentary or nearly typical; that almost always in feeble minded persons and deaf-mutes and often in representatives of lower races the gyrus is but poorly developed; that in intellectual persons the complexity of the *gyrus frontalis inferior* is in a general way correlated with the development of its function. None of these conclusions are new, and the author does not make it clear that Rüdinger in 1882 covered nearly the same ground in a concise manner. Broca's schema of the gyri (p. 22) is valuable and this reproduction of it helps to make it accessible. The author has taken some part in describing the brains of several intellectual persons, and at the end of the book the descriptions are utilized together with an account of the *gyrus frontalis inferior* in the brain of Gambetta—the original description of the entire brain having been given by Chudzinski and Mathias Duval